THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

CLAIM CONSTRUCTION MEMORANDUM AND ORDER

Before the Court is the Opening Claim Construction Brief (Dkt. No. 74) filed by Plaintiff Gigamon Inc. ("Plaintiff" of "Gigamon"). Also before the Court is the Responsive Claim Construction Brief (Dkt. No. 97) filed by Defendant Apcon, Inc. ("Defendant" or "Apcon") as well as Plaintiff's reply (Dkt. No. 103).

The Court held a hearing on June 25, 2020.

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I. BACKGROUND

Plaintiff alleges infringement of United States Patents No. 8,570,862 (the "'862 Patent"), 8,824,466 (the "'466 Patent"), 8,830,819 (the "'819 Patent"), 8,873,557 (the "'557 Patent"), 9,077,656 (the "'656 Patent"), and 9,769,049 (the "'049 Patent") (collectively, "the patents-insuit"). (Dkt. No. 74, Exs. 1–6). Plaintiff submits that "[i]n general, the patents-in-suit concern monitoring of packet networks and aspects thereof." (Dkt. No. 74, at 1.)

The '656 Patent, titled "Packet Switch Methods and Systems," issued on July 7, 2015, and bears an earliest priority date of May 5, 2004. Although the '656 Patent is not the earliest-issued patent-in-suit, the '656 Patent bears the earliest priority date of the patents-in-suit. Plaintiff submits that the '656 Patent relates to a "packet broker" that facilitates centralization of packet data network monitoring. The Abstract of the '656 Patent states:

The present invention relates to a packet switch and a packet switching method. An example embodiment of the present invention comprises at least three network ports, at least one instrument port, a mux-switch, a packet switch fabric, and an address table. The embodiment updates the address table to include the source address of each ingress packet of each network port and associate the source address with that network port. The mux-switch routes the ingress packet traffic of each network port according to the identity of the network port so that at least a copy of the packet traffic of one of the network ports is routed to an instrument port. The packet switch fabric routes the packets from the instrument ports to the network ports according the destination address of the packet and the identity of the network port that is associated with the destination address as recorded in the address table.

The '862 Patent, the '466 Patent, the '557 Patent, and the '049 Patent are not related to the '656 Patent (*see* Dkt. No. 97, at 2 n.3), but Plaintiff submits that these patents all pertain to facilitating centralization of packet data network monitoring. Plaintiff submits that these patents "concern out-of-band network monitoring of physical and virtual networks (the '656, '862, and '049 patents)" and "packet identification and de-duplication (the '466 and '557 patents)." (Dkt. No. 74, at 1.)

The '819 Patent, titled "Network Switch With By-Pass Tap," issued on September 9, 2014, and bears a filing date of February 26, 2010. Plaintiff submits that the '819 Patent relates to "facilitating the monitoring of packet networks when monitoring equipment sits within the network traffic flow." (Dkt. No. 74, at 1.) The Abstract of the '819 Patent states:

A network switch apparatus includes a first network port, a second network port, a first inline port, a second inline port, wherein the first and second inline ports are for communication with a pass-through device, a packet switch, and a by-pass device configured to operate in a first mode of operation, wherein in the first mode of operation, the by-pass device is configured to pass a first packet received at the first network port to the packet switch. The by-pass device is configured to switch from the first mode of operation to a second mode of operation upon an occurrence of a condition, and wherein in the second mode of operation, the by-pass device is configured to transmit a second packet received at the first network port to the second network port without passing the second packet to the packet switch.

II. LEGAL PRINCIPLES

It is understood that "[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is clearly an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

"In some cases, however, the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015) (citation omitted). "In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the 'evidentiary underpinnings' of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal." *Id.* (citing 517 U.S. 370).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court's claim construction analysis is substantially guided by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim

are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to, and intended to be read by, others skilled in the particular art. *Id.*

Despite the importance of claim terms, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314–17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the United States Patent and Trademark Office ("PTO") understood the patent. *Id.* at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*; *see Microsoft Corp. v. Multi-Tech Sys.*, *Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that "a patentee's statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation").

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319–24. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.*

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court

did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323–25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

III. AGREED TERMS

In their April 10, 2020 Joint Claim Construction and Prehearing Statement (Dkt. No. 60, App'x A, at A1) and during the course of briefing (Dkt. No. 97, at 1 n.1; *see* Dkt. No. 74, at 6), the parties submitted the following agreements:

<u>Term</u>	Agreed Construction
"pass-through device"	"a device configured to receive and forward packets"
('819 Pat., Cls. 21–24, 31, 40)	
"L3 IPv4 header"	"Layer 3 Internet Protocol Version 4 header"
('557 Pat., Cls. 9, 18)	
"L3 IPv6 header"	"Layer 3 Internet Protocol Version 6 header"
('557 Pat., Cls. 9, 18)	
"duplicate packet"	"a packet that has at least the same payload as that of another packet"
('557 Pat., Cls. 1, 3–6, 10, 12–15, 19)	
"tunnel format"	"a format that involves adding additional information to the original packet, such as a
('049 Pat., Cls. 31, 32)	header"

IV. DISPUTED TERMS

After Plaintiff filed its Opening Claim Construction Brief (Dkt. No. 74) on May 13, 2020, the parties conferred (*see*, *e.g.*, Dkt. No. 90), the Court held a status conference on May 27, 2020, and Defendant filed its Responsive Claim Construction Brief (Dkt. No. 97) on June 1, 2020,

addressing the remaining disputed terms. Herein, the Court addresses the remaining disputed terms and does not address terms presented in Plaintiff's Opening Claim Construction Brief that are not addressed in Defendant's Responsive Claim Construction Brief. As to terms in Plaintiff's Opening Claim Construction Brief that are not addressed in the present Claim Construction Memorandum and Order, the Court accepts the parties' agreement that such terms "do not need to be construed by the Court." (Dkt. No. 97, at 1.)

A. "out of band"

"out of band"

('862 Patent, Claims 8, 25; '049 Patent, Claims 1, 16, 31; '656 Patent, Claims 1, 2, 14, 26; '466 Patent, Claim 12)

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary.	"in a different frequency band that won't impact network traffic data flow"
Alternatively: "outside the path of network traffic"	

(Dkt. No. 60, App'x B, at B12, B28, B53 & B67; Dkt. No. 97, at 2; see Dkt. No. 74, at 11; see also Dkt. No. 103, at 2; Dkt. No. 106, App'x A, at 1.)

(1) The Parties' Positions

Plaintiff argues that its proposed interpretation is consistent with disclosures in the specification. (Dkt. No. 74, at 12.) Plaintiff urges that "[t]he Court should reject Apcon's attempt to import an unrelated concept—frequency—into the patents-in-suit." (*Id.*, at 13.)

Defendant responds by citing prosecution history, arguing that "[t]he Examiner's explanation that 'out-of-band' refers to a 'different frequency band' is objective, contemporaneous intrinsic evidence confirming the meaning of the term." (Dkt. No. 97, at 3.) Defendant also

submits that "technical dictionary definitions from around the time of the purported inventions confirm that a person of ordinary skill would recognize that 'band' refers to a specified range of frequencies." (*Id.*, at 4–5.) As to Plaintiff's argument that Defendant's proposal imports "frequency" into the patents-in-suit, Defendant responds that "[n]o need existed for the patentee to discuss basic networking concepts that would have been well known to a person of ordinary skill." (*Id.*, at 6.) Further, Defendant argues that "nowhere in the specifications is the term 'band' defined as or used interchangeably with 'path of network traffic," "[n]or does Gigamon offer any reason as to why the term used in the patents is 'out-of-band' as opposed to 'out-of-network,' 'out-of-path,' or 'out-of-network path,' even though 'network' and 'path' are common terms used throughout the specification." (*Id.* (emphasis omitted).) Finally, Defendant argues that Plaintiff's proposal would exclude embodiments disclosed in the specifications. (*Id.*, at 6–7.)

Plaintiff replies that "Figures 6 and 10 of the '656 patent demonstrate the difference between traditional inline monitoring (using a sniffer) and out-of-band management (per the invention)..." (Dkt. No. 103, at 3.) Plaintiff also argues that "Apcon points to an IPS [(intrusion protection system)], which is not an embodiment of the patent." (*Id.*, at 4.)

At the June 25, 2020 hearing, the parties reiterated the arguments set forth in their briefing, particularly as to the prosecution history and the extrinsic dictionary definitions, and the parties also addressed the patent figures as noted below.

(2) Analysis

Claim 1 of the '656 Patent, for example, recites (emphasis added):

1. A packet switch configured to be connected to a traffic production network and a network monitoring instrument, the packet switch comprising:

a network port to be connected to the traffic production network, wherein the packet switch is an *out-of-band* device with respect to the traffic production network, and the network port is configured to receive packets from the traffic production network;

an instrument port for communication with the network monitoring instrument; and

a computer-readable medium containing computer-executable instructions to operate the packet switch, comprising instructions to:

establish a logical connection between the network port and the instrument port based on a network flow; and

forward packets received from the traffic production network through the network port to the instrument port based on the packets belonging to the network flow.

Neither side submits any expert opinion on the meaning of "out-of-band" in the context of packet networks.

Plaintiff submits that the patents here at issue are directed to an "intermediary device [that] sits between the network and instruments and passes packets from the network to the instruments." (Dkt. No. 74, at 12 (citing '656 Patent at Fig. 10 & 20:43–45, '862 Patent at Figs. 1 & 4–6, '466 Patent at Figs. 1, 2, 7 & '049 Patent at Fig. 2).) The specification of the '862 Patent discloses:

As shown in FIGS. 1, 4, 5, and 6, the packet switch appliance 102 is configured to pass packets from a network to one or more network instrument(s) through instrument port(s). Thus, the packet switch appliance 102 is configured to process network traffic from the network in an *out-of-band* configuration.

'862 Patent at 9:41–46 (emphasis added); see, e.g., id. at Fig 1. The '049 Patent discloses:

[I]n some embodiments, the packet switch 140 may be an "out-of-band" network switch, which is configured to obtain packets and pass them to an instrument or to a network that is different from that associated with the original intended destination of the packets.

'049 Patent at 4:41–45 (emphasis added). Nothing in these disclosures, or any disclosure identified by Defendant, refers to ranges of frequencies.

At the June 25, 2020 hearing, Defendant cited Figure 7 of the '656 Patent, which Defendant argued illustrates a device that is not outside the path of network traffic. Plaintiff disputed this interpretation of Figure 7. The term "out-of-band" appears in only the claims of the '656 Patent, not in the specification, let alone in any description of Figure 7. Defendant's arguments regarding

Figure 7 are unpersuasive. Defendant's arguments as to Figure 1 of the '049 Patent are similarly unpersuasive. *See* '049 Patent at 3:19–25 ("The device 100 is configured to communicate packets between the first and second nodes 160, 162 via the network ports 112, 114."). Although the specification of the '049 Patent does use the phrase "out-of-band," as noted above, the specification does not describe Figure 1 as illustrating an out-of-band configuration.

Defendant cites prosecution history of the '862 Patent in which the examiner rejected the pending claims over the "Gallatin" reference (United States Patent Application Publication No. 2005/0265364). (Dkt. No. 97, Ex. G, Aug. 3, 2012 Office Action, at 2.) The examiner stated:

... Gallatin et al. further teach wherein the packet switch device is configured to process network traffic from the network in an *out-of-band* configuration (Gallatin et al. disclose a the [*sic*] Internet 1004 is coupled via routers 1006a-b and firewalls 1008a-b. Switch 1010a is coupled to servers 1012a-b and IP phones 1014a-c. Switch 1010b is coupled to servers 1012c-e. A sniffer 1016, an IDS/IDP 1018 and a forensic recorder 1020 are also coupled to the network monitoring system 1002, see page 7 para[0093] and fig. 10. *It is inferred the switches communicate to different device [sic] belonging to different frequency band.*)

(*Id.*, at 6–7 (emphasis added).) Defendant also cites similar statements by the examiner later during prosecution. (*Id.*, Ex. I, Jan. 18, 2013 Office Action, at 7–8.) Defendant submits that the patentee never contested the examiner's statements regarding "different frequency band." (*See id.*, Ex. H, Nov. 5, 2012 Response to Office Action; *see also id.*, Ex. J, Apr. 18, 2013 Response to Office Action.)

On one hand, "statements by the examiner can inform how a person of ordinary skill in the art would interpret the claims." *Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1347 (Fed. Cir. 2005) (although "an applicant's silence regarding [examiner] statements does not preclude the applicant from taking a position contrary to the examiner's statements when the claim terms are construed during litigation," "[s]tatements about a claim term made by an examiner during

prosecution of an application may be evidence of how one of skill in the art understood the term at the time the application was filed").

On the other hand, no definitive statements are apparent that might give rise to a definition or disclaimer, and generally "it is the applicant, not the examiner, who must give up or disclaim subject matter that would otherwise fall within the scope of the claims." *Innova/Pure Water Inc. v Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1124 (Fed. Cir. 2004); *see Salazar*, 414 F.3d at 1347 ("This court refuses to create a rule or presumption that the applicant in this case disavowed claim scope by silence.").

On balance, this prosecution history lacks sufficient clarity to warrant adopting the narrow interpretation proposed by Defendant. *See Phillips*, 415 F.3d at 1317 ("[B]ecause the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes."); *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009) ("unclear prosecution history cannot be used to limit claims").

As to extrinsic evidence, Defendant cites eight technical dictionaries that define "band" in the context of communications as referring to a range of frequencies. (*See* Dkt. No. 97, Exs. M—U.) Defendant urges that because "band" is a well-known term, the absence of any discussion of frequencies in the patents-in-suit is no obstacle to adopting Defendant's proposed construction. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 959 F.3d 1091, 1102 (Fed. Cir. 2020) ("a 'patent need not teach, and preferably omits, what is well known in the art") (quoting *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 1534 (Fed. Cir. 1987)).

These dictionary definitions need not be reproduced and examined here in detail because Plaintiff does not contest that in some contexts the term "band" can refer to a frequency band. Defendant further cites several technical definitions of "out-of-band" that refer to frequencies that are outside a given range of frequencies, such as outside a range of frequencies used for data communication. (*See id.*, at Exs. M, N, Q, S, T & V.) Again, Plaintiff does not contest, as a general matter, that in some contexts the word "band" can refer to a range of frequencies.

Some of this extrinsic evidence itself, however, demonstrates that "out-of-band" is not limited to referring to frequency ranges. One of these dictionaries defines "out of band" as "outside the defined frequency range or channel for a communication signal; *more generally, outside a defined code*. For example, characters with numeric values greater than 128 can be described as 'out of band' if ASCII characters are expected." (*Id.*, Ex. V, *Dictionary of Computer & Internet Terms* 354 (11th ed. 2013) (emphasis added).) This is also consistent with how one of these dictionaries explains that "out of band" can have meaning in the context of a packet data network. (*Id.*, Ex. S, *Webster's New World Telecom Dictionary* 354 (2008) (referring to "[p]acket technologies" using "headers and trailers that support out-of-band signaling" and using "separate signaling packets for various network management purposes").

Further, Plaintiff cites prosecution history of the '656 Patent in which the patentee distinguished the "Kloth" reference (United States Patent Application Publication No. 2005/0053073):

Claim 1 has been amended to recite "the packet switch is an out-of-band device with respect to the traffic production network, and the network port is configured to receive packets from the traffic production network". Kloth does not disclose or suggest the above features.

Rather, Kloth discloses a "network device" 120 which is a part of a traffic production network 105. In particular, as shown in figure 3 (reproduced below for the Examiner's convenience), the network device 120 is a part of the traffic production network 105 configured to transmit packets between nodes. Thus, the network device 120 of Kloth is not any out-of[-]band device with respect to the traffic production network 105.

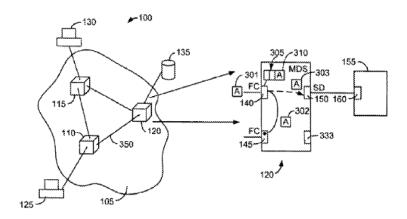


FIG. 3

That the network device 120 of Kloth is not any out-of-band device is further evidenced from paragraph 5 of Kloth, which explains that when network devices malfunctions [sic], "congestion of traffic on the network" results. Accordingly, the network device of Kloth must be a part of the traffic production network. This is because an out-of-band device does not participate in network traffic production. So a failure of an out-of-band device will not have any impact on the performance of the traffic production network.

(Dkt. No. 97, Ex. Y, Jan. 8, 2015 Response to Office Action, at 7–8 (emphasis added).)

The patentee thus explained that an "out-of-band" device does not transmit packets between nodes of the network (the network as to which the device is "out-of-band"). This understanding is also consistent with the above-discussed intrinsic and extrinsic evidence. *See* '862 Patent at 9:41–46; *see also* '049 Patent at 4:41–45; Dkt. No. 97, Ex. S, *Webster's New World Telecom Dictionary* 354 (2008).

Finally, Defendant argues that Plaintiff's proposed construction would exclude disclosed embodiments, such as an Intrusion Prevention System ("IPS"), which is an "active device" in the path of network traffic and can "block suspicious packets" and "send[] its own packets to fool the intruder." '656 Patent at 5:56–59. Yet, even assuming that this disclosure is directed to an embodiment rather than being a description of conventional network monitoring tools, "[i]t is not

necessary that each claim read on every embodiment." *Baran v. Med. Dev. Techs., Inc.*, 616 F.3d 1309, 1316 (Fed. Cir. 2010).

The Court therefore hereby construes "out of band" to mean "outside the path of network traffic."

B. "network port" and "instrument port"

"network port"

('862 Patent, Claims 1, 13, 18, 30; '656 Patent, Claims 1, 2, 14, 26; '466 Patent, Claims 1, 8, 17, 20, 22, 23; '819 Patent, Claims 21, 31, 40)

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary.	"a specifically designated port connected to a network"
Alternatively:	
"a port capable of being connected to a network"	

"instrument port"

('862 Patent, Claims 1, 7, 9, 13, 18, 24, 26, 30; '656 Patent, Claims 1, 2, 14, 26; '466 Patent, Claims 1, 8, 17, 20, 22, 23; '819 Patent, Claim 40; '049 Patent, Claims 1, 16, 31)

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary.	"a specifically designated port connected to a network instrument"
Alternatively: "a port capable of being connected to an instrument"	

¹ Defendant previously proposed: "a specifically designated port connected to a network tap or switch of the network." (Dkt. No. 60, App'x B, at B3, B18, B32 & B51.)

(Dkt. No. 60, App'x B, at B3, B18, B32 & B51 ("network port"); *id.*, at B5, B19, B40, B54 & B69 ("instrument port"); Dkt. No. 74, at 8 & 9; Dkt. No. 97, at 11; *id.*, at 11 n.6; Dkt. No. 103, at 10; Dkt. No. 106, App'x A, at 1.) At the June 25, 2020 hearing, the parties agreed that these terms have the same meaning across all five of the above-identified patents.

(1) The Parties' Positions

Plaintiff argues as to "network port" that "Apcon's addition of 'specifically designated' improperly seeks to exclude ports that may be selectively configured to be a network port." (Dkt. No. 74, at 8.) Plaintiff also argues that "Apcon's 'connected to' language contradicts, or is redundant in view of, the claim language." (*Id.*, at 9.) As to "instrument port," Plaintiff presents substantially the same arguments. (*See id.*, at 9–10.)

Defendant responds that "[t]he patentee chose the distinct terms 'instrument port' and 'network port' for a reason, and thus Apcon proposes that the terms be construed to make clear that they are independent, distinct, and have specifically designated properties in accordance with the intrinsic evidence." (Dkt. No. 97, at 11.) Defendant argues that "[f]ar from being generically interchangeable ports that are 'capable' of performing those functions (as Gigamon contends), the claims set out a specific topology where packets 'received from the traffic production network' are forwarded 'through the network port to the instrument port' via a 'logical connection' that is established 'between' them." (Id., at 12 (quoting '656 Patent, Cl. 1).) Defendant submits that "[i]f the network and instrument ports could be the same port as envisioned by Gigamon's construction, this limitation would make no sense." (Dkt. No. 97, at 15.) Defendant also submits that "the '656 Patent specifically distinguishes prior art hub devices that, unlike the patents, had ports that performed both functions" (Id., at 14.) Further, Defendant submits that "the applicant made that distinction explicit during prosecution." (Id.)

Plaintiff replies that "Apcon's addition is a temporal requirement that is not compelled by the claims," and "[t]hese terms need no further amplification because the claims themselves define each port, recite the connections between the ports, and the functioning of each port." (Dkt. No. 103, at 10 & 12.)

At the June 25, 2020 hearing, Defendant clarified that it is not arguing that a device must actually be connected in order to meet these claims limitations. In other words, Defendant concedes that a product offered for sale is not immune from infringement merely by virtue of having no cables attached. Defendant urged, however, the claims require that the ports of a device must be configured with network ports and instrument ports before the device is connected to anything (that is, before anything is "plugged in"). Defendant similarly urged that the "network port" and "instrument port" limitations cannot be met by any generic port.

Plaintiff responded that no construction is necessary because the claims already recite what each port is and what it does. Plaintiff nonetheless characterized the "network port" and "instrument port" as each being "configured" to communicate with networks and instruments, respectively. Plaintiff maintained that this configuration is not permanent but rather could change over time. Defendant replied that this configuration cannot be changed during communication operations but rather, at a minimum, a port must be disconnected from its connected device (that is, "unplugged") before it can be reconfigured to be a different type of port.

(2) Analysis

Claim 1 of the '656 Patent, for example, recites (emphasis added):

1. A packet switch configured to be connected to a traffic production network and a network monitoring instrument, the packet switch comprising:

a *network port to be connected to the traffic production network*, wherein the packet switch is an out-of-band device with respect to the traffic production network, and the *network port* is configured to receive packets from the traffic production network;

an *instrument port* for communication with the network monitoring instrument; and

a computer-readable medium containing computer-executable instructions to operate the packet switch, comprising instructions to:

establish a logical connection between the *network port* and the *instrument port* based on a network flow; and

forward packets received from the traffic production network through the *network port* to the *instrument port* based on the packets belonging to the network flow.

The specification of the '862 Patent discloses: "Packet switch appliances can be used to forward packets in the packet-switching network. Packet switch appliances have one or more network ports connected to the packet-switching network." '862 Patent at 1:39–42; *see id.* at Fig. 1 (illustrating "instrument ports" 106a and 106b for connecting to network instruments 112a and 112b and also illustrating "network port" 104a for connecting to a packet-switching network 108).

Defendant's proposal of "connected," however, is confusing (if not inconsistent) when read in the context of above-reproduced Claim 1 of the '656 Patent, which recites "a network port *to be* connected to the traffic production network." Similarly, as to "instrument port," Claim 1 of the '656 Patent recites "an instrument port *for* communication," and Claim 40 of the '819 Patent recites "an instrument port *for connection* to a non-pass through device." To whatever extent the claims require a network port or an instrument port to be connected, that requirement is set forth by other claim language, not by the term "network port" or "instrument port" itself.

As to the meanings of "network port" and "instrument port," the Background of the Invention section of the '656 Patent provides context:

Network visibility has decreased since the introduction of a packet switch. Before a packet switch, hubs were used. When hubs were used every port in the hub shares the same medium. Therefore every port can see the traffic at every other port. With this arrangement, network monitoring and trouble[-]shooting is relatively easy because all the user needs is to plug in an instrument into one of the hub ports and visibility to all the traffic inside the hub is obtained.

However, because every port sees the traffic of every other port, a hub utilizes a significant amount of bandwidth. The problem of bandwidth usage leads to the use of a packet switch in a network. Through a MAC address learning and forwarding mechanism, a switch forwards a packet entering one port to out of another port without letting the other ports become involved.

'656 Patent at 4:53–67; see id. at 4:1 ("Conventional Network Monitoring Systems").

The Summary of the Invention section of the '656 Patent then refers to "network ports" and "instrument ports" distinctly when referring to a "key feature" of the invention:

The key feature of the present invention is configuring a switch so that it has a set of network ports and a set of instrument ports, and that packets flowing from the network ports to the instrument ports go through a circuit switch, whereas at the same time packets flowing from an instrument port to a network port go through a packet switch.

'656 Patent at 6:47–50.

The specification is thus consistent with Defendant's proposal that the claimed "network port" and "instrument port" are distinct from one another. Likewise, Defendant cites prosecution history of the '656 Patent in which the patentee stated that "network port" and "instrument port" are different from one another:

As an initial matter, Appellant respectfully notes that the device in figure 1 of APA [("alleged admitted prior art")] discloses a switch device having only "network ports", and there is no "instrument port" for communication with a network monitoring instrument as described in claim 1 (see paragraphs 9–12). Note that cla[i]m 1 recites *both* "network port" and "instrument port". Accordingly, "network port" and "instrument port" are presumed to mean different things, and the network port in figure 1 of APA cannot be analogized as the claimed "instrument port". Also, figure 1 of APA does not disclose any port for communication with a "network monitoring instrument". Thus, the subject matter of claim 1 could not have been rendered obvious in view of figure 1 of APA.

(Dkt. No. 97, Ex. K, June 30, 2014 Notice of Appeal, at 2 (emphasis in original); *see id.*, at 1; *see also id.*, Ex. L, May 29, 2014 Response to Office Action, at 7 (similar).)

Defendant expresses concern that "Gigamon's constructions allow the same port to serve as an instrument port and as a network port at the same time." (Dkt. No. 97, at 15.) The above-

cited evidence from the specification and the prosecution history comports with the general principle that "[i]n the absence of any evidence to the contrary, we must presume that the use of these different terms in the claims connotes different meanings." *CAE Screenplates Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000) (citation omitted); *see Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) ("Where a claim lists elements separately, the clear implication of the claim language is that those elements are distinct component[s] of the patented invention.") (citations and internal quotation marks omitted).

In some cases, a single physical structure may embody more than one recited structure. *See Powell v. Home Depot USA, Inc.*, 663 F.3d 1221, 1231 (Fed. Cir. 2011) (rejecting argument that "cutting box" and "dust collection structure" limitations could be met only by a device having separate structures corresponding to each limitation); *cf. Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1304 (Fed. Cir. 2011) ("the specifications and the claims indicate that the 'retainer member' and the 'needle holder' need not be two separate pieces").

Here, however, above-reproduced Claim 1 of the '656 Patent, for example, recites instructions for "establish[ing] a logical connection *between* the network port and the instrument port" and for "forward[ing] packets received from the traffic production network *through* the network port *to* the instrument port."

On balance, the above-discussed intrinsic evidence, read in light of the above-cited authorities, demonstrates that a single port cannot be both a "network port" and an "instrument port" at the same time. Thus, a port configured to be connected to a network is not at the same time configured to be connected to an instrument, and a port configured to be connected to an instrument is not at the same time configured to be connected to a network. This requirement is

necessary in light of the above-discussed intrinsic evidence and also is necessary to give effect to the words "network" and "instrument" in these terms. That is, a "network port" cannot simply be any port that could be configured to be connected to a network, and an "instrument port" cannot simply be any port that could be configured to be connected to an instrument.

Nonetheless, the disclosures cited by Defendant do not compel Defendant's proposal that a "network port" or "instrument port" must be "specifically designated." The cited disclosures refer to connections and communications but do not reference or explain "specifically designated." See '656 Patent at 2:14-15 ("a network port is linked to and in communication with a set of terminals in the packet-switching network"); see also id. at 8:42–43; '862 Patent at 1:40–42 ("one or more network ports connected to the packet-switching network"); '656 Patent at 9:64–66 ("The instrument ports of the packet-switching apparatus are coupled to network instruments."), 12:65– 66 ("an instrument connected to an instrument port"), 13:20–21 (same), 16:2–3 (same), 16:15–25 ("ports 1201, 1203 and 1205 are assigned as network ports and port 1208 is assigned as an instrument port"); '862 Patent at 4:2-3 ("two network instruments 112a and 112b connected to instrument ports 106a and 106b, respectively"), 6:13-15 ("network instrument 112a, which is connected to instrument port 106a"), 6:31-32 ("instrument port 106c, which is connected to another network instrument 112c"); '466 Patent at 3:20–29 ("The packet switch appliance 102 of FIG. 1 includes a plurality of ports. Each port may be configured as a network port or tap port for connection to the network. . . . Typically, a network port is connected to a network tap or switch of the network. A port of the packet switch appliance may also be configured as an instrument port, which is used for connecting to a network instrument.").

Moreover, dependent Claim 8 of the '466 Patent recites that "the first network port is selectively configurable to function as a network port for packet reception, or an instrument port for packet transmission to a device." The specification of the '466 Patent likewise discloses:

The typical packet-switching appliance may include a number of ports. A given port may be *configured as a network port* for connection to the packet-switching network. *Alternatively*, a port may be *configured as an instrument port* for connection to one or more network instruments such as packet sniffers, intrusion detection systems, intrusion prevention systems, forensic recorders, or data storage devices.

'466 Patent at 1:54–61 (emphasis added). Defendant notes that this disclosure refers to prior art devices, but the disclosure is nonetheless informative as to how a person of ordinary skill in the art would understand the terms "network port" and "instrument port." In other words, Defendant fails to show that the patentee's discussion of prior art cannot inform how a person of ordinary skill in the art would understand the words used in the claims.

This notion of "configured" also appears in disclosures in the '819 Patent and in the '049 Patent. The '819 Patent discloses:

As used in this specification, the term "instrument port" refers to any port that is *configured* to transmit packets to an instrument, wherein the instrument may be a sniffer, a network monitoring system, an application monitoring system, an intrusion detection system, a forensic storage system, an application security system, etc., which are not pass through devices (i.e., they can only receive packets intended to be communicated between two nodes 30, 32, and cannot transmit such packets downstream).

'819 Patent at 8:10–20 (emphasis added). The '049 Patent discloses:

As used in this specification, the term "instrument port" refers to any port that is *configured* to transmit packets to an instrument, wherein the instrument may be a non-pass through device (i.e., it can only receive packets intended to be communicated between two nodes, and cannot transmit such packets downstream), such as a sniffer, a network monitoring system, an application monitoring system, an intrusion detection system, a forensic storage system, an application security system, etc., or the instrument may be a pass-through device (i.e., it can receive packets, and transmit the packets back to the device 100 after the packets have been processed), such as an intrusion prevention system.

'049 Patent at 3:53-65 (emphasis added).

Plaintiff's proposal of merely "capable of," however, is overbroad. The above-discussed evidence compels requiring actual configuration, not mere capability. At the June 25, 2020 hearing, Plaintiff acknowledged that these disputed terms contemplate configuration.

The Court therefore hereby construes these disputed terms as set forth in the following chart:

<u>Term</u>	<u>Construction</u>
"network port"	"a port configured to be connected to a network (and not configured to be connected to an instrument)"
"instrument port"	"a port configured to be connected to an instrument (and not configured to be connected to a network)"

C. "non-pass through device"

"non-pass through device" ('819 Patent, Claims 36, 40)		
Plaintiff's Proposed Construction	Defendant's Proposed Construction	
No construction necessary	"a device configured to receive and not forward packets"	

(Dkt. No. 60, App'x B, at B41; Dkt. No. 74, at 24; Dkt. No. 97, at 16; Dkt. No. 103, at 14; Dkt. No. 106, App'x A, at 2.)

At the June 25, 2020 claim construction hearing, the parties stated they have reached agreement that "non-pass through device" means "a device configured to receive and not forward packets downstream."

The Court therefore hereby construes "non-pass through device" to mean "a device configured to receive and not forward packets downstream."

D. "packet value"

"packet value" ('862 Patent, Claims 1, 18, 34, 35, 39, 40)	
Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary	"a non-line rate value specified by the criterion"

(Dkt. No. 60, App'x B, at B7; Dkt. No. 74, at 19; Dkt. No. 97, at 19; Dkt. No. 103, at 10; Dkt. No. 106, App'x A, at 2.)

(1) The Parties' Positions

Plaintiff argues that "packet value' is self-explanatory—it is a value of a packet." (Dkt. No. 74, at 19.) Plaintiff urges that Defendant's reliance on the prosecution history should be rejected because "the applicant *did not* define that a packet value is a non-line rate packet value or specify that a 'packet value' cannot include line rate values." (*Id.*, at 19–20.)

Defendant responds that "Gigamon's proposal—which does not construe the term at all and ignores the applicant's statements during prosecution—would permit a line rate to be used as a packet value notwithstanding the applicant's clear distinction between the two during prosecution, and therefore should be rejected." (Dkt. No. 97, at 21.)

Plaintiff replies that "[t]he claims explain what the packet value is, where it comes from, and how it is used in the invention." (Dkt. No. 103, at 12.) Plaintiff also argues that, in the prosecution history cited by Defendant, "the applicant noted that a load balancing system is

concerned only with line-rate . . ., whereas the novel system may concern 'any' value that a packet may have, including line rate." (*Id.*, at 13.)

(2) Analysis

Claim 1 of the '862 Patent, for example, recites (emphasis added):

- 1. A packet switch device for providing visibility of traffic in a network, comprising:
 - a processing unit;
- a first network port communicatively coupled to the processing unit, wherein the first network port is configured to communicate with the network;
- a plurality of instrument ports communicatively coupled to the processing unit, each of the instrument ports configured to communicate with a respective network monitoring instrument;

wherein the processing unit is configured to:

process a packet received at the first network port using a first rule with a first criterion, and

process the packet received at the first network port using a second rule with a second criterion;

wherein each of the first criterion and the second criterion specifies a *packet value*, wherein the *packet value* specified by the first criterion is for comparison with a value of a portion of the packet, and wherein the processing unit is configured to drop or forward the packet based at least in part on a result from the comparison.

The parties have discussed prosecution history in which the patentee distinguished the "Gallatin" reference (United States Patent Application Publication No. 2005/0265364, attached to Defendant's response brief as Exhibit W):

Claim 59 recites that each of the first criterion and the second criterion specifies a packet value. According to pages 3–4 of the Office Action, the load balancing feature disclosed in Gallatin is analogized as the claimed second criterion for performing packet dropping or packet forwarding to one or more of the instrument ports. However, Applicant respectfully notes that *load balancing does not involve* any criterion that specifies a packet value. Rather, as described in Gallatin, the *load balancing is based on line rate, which is not any packet value* (see paragraph 112).

According to pages 4–5 of the Office Action, it appears that the Examiner is in agreement that Gallatin does not disclose the above features. However, according

to page 5 of the Office Action, Barr allegedly discloses a criterion that specifies a packet value, and it would have been allegedly obvious to implement such feature of Barr in the method of Gallatin. Applicant respectfully disagrees for the following reasons.

First, as discussed, the load balancing of Gallatin is based on line rate, not any packet value. Thus, the purported combination to change the load balancing rule of Gallatin so that it involves a packet value would render Gallatin inoperable for its intended purpose (which is to do load balancing based on line rate), and would also contradict its principle of operation. Note that no prima facie case of any § 103 rejections can be established if a purported combination would render a cited art inoperable for its intended purpose or would contradict a principle of operation of a cited art . . .

More importantly, Barr specifically teaches "programming the router with a forwarding rule with respect to the packets received by the router on the third port, so as to override a main routing table of the router" (column 3, lines 39–44). On the other hand, the load balancing feature of Gallatin, in order for it to operate as intended, is understood as requiring its load balancing rule in the routing table be followed, not overridden, or otherwise the packets will not be able to be load balanced based on the line rate as taught in Gallatin. In view of the foregoing, one skilled in the art certainly would not combine the router programming feature (which involves determining a forwarding rule with respect to a received packet) of Barr with the load balancing feature of Gallatin.

For at least the foregoing reasons, claim 59 and its dependent claims should be allowable over Gallatin.

(Dkt. No. 97, Ex. J, Apr. 18, 2013 Response to Office Action, at 9–10 (emphasis modified); *see id.*, Ex. W, U.S. Pat. Appl. Pub. No. 2005/0265364, at ¶ 112 ("These instruments [*sic*] ports may have different line rates, such as some may be running at 1 Gbps and others may be running at 100 Mbps or 10 Mbps.").) The Examiner allowed the claims. (*Id.*, Ex. X, June 24, 2013 Notice of Allowability.)

The above-italicized statements by the patentee amount to a definitive statement that processing based on line rate is different from processing based on a "packet value." *See Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence

and protects the public's reliance on definitive statements made during prosecution."). Proper interpretation of the disputed term should give effect to the patentee's statements that load balancing in Gallatin is based on line rate and that "load balancing does not involve any criterion that specifies a packet value." (Dkt. No. 97, Ex. J, Apr. 18, 2013 Response to Office Action, at 9.)

But although "packet value" thus does not include "line rate," this is already evident on the face of the above-reproduced claim, particularly as to the recital of the packet value being "for comparison with a value of a portion of the packet." '862 Patent, Cl. 1. The same analysis applies to the other claims here at issue. *See id.*, Cls. 18, 34, 35, 39 & 40.

At the June 25, 2020 hearing, the parties agreed as a general matter that a person of ordinary skill in the art would understanding the meaning of "packet value." The parties addressed the meaning of, and reasons for, Defendant's proposed construction. Plaintiff explained that "line rate" is a property of a connection, not a value that can be present in a packet. In other words, according to Plaintiff, nothing in a packet says anything about line rate. Plaintiff agreed that, in the prosecution history cited by Defendant, the patentee explained that load balancing has nothing to do with packet values. Defendant expressed concern that Plaintiff might later point to line rate as being a packet value. Plaintiff replied by expressing concern that Defendant's proposal would require Plaintiff to prove a negative at trial.

The Court proposed noting in the Court's analysis of this term that a line rate is not a packet value. Plaintiff and Defendant agreed that such an explanation by the Court would appropriately address the parties' concerns. Therefore, based on the prosecution history and the context provided by surrounding claim language, discussed above, and based on the above-summarized oral arguments presented by the parties at the June 25, 2020 hearing, the Court hereby finds that a line rate is not a packet value.

Based on this express finding and understanding that a line rate is not a packet value, the Court hereby construes "packet value" to have its plain meaning.

E. "destination address associated with a first location"

"destination address associated with a first location" ('862 Patent, Claims 9, 26)	
Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary	"a terminal address of the destination terminal of the packet for a first location"

(Dkt. No. 60, App'x B, at B14; Dkt. No. 74, at 21; Dkt. No. 103, at 15; Dkt. No. 106, App'x A, at 2.)

At the June 25, 2020 hearing, the parties submitted that the claims in which this disputed term appears are no longer asserted. The Court therefore does not further address this term.

V. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

So ORDERED and SIGNED this 2nd day of July, 2020.

UNITED STATES DISTRICT JUDGE